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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,904

08/09/2006

Giovanni Cella

2553-1018

4030

466 7590 02/14/2008

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EXAMINER

BONK, TERESA

ART UNIT

PAPER NUMBER

3725

MAIL DATE

DELIVERY MODE

02/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,904	Applicant(s) CELLA, GIOVANNI	
	Examiner Teresa M. Bonk	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/9/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12, there is insufficient antecedent basis for the limitations “the two flows” and “the measured pressure valves.”

In claim 13, there is insufficient antecedent basis for the limitations “the matrix die,” “the plane sheet-bearing surface,” “the matrix die groove,” and “the slot surface.”

In claim 14, there is insufficient antecedent basis for the limitation “the pressure.” It is also unclear what “it” is being referred to.

In claim 15, there is insufficient antecedent basis for the limitations “the two air flows,” “the two pneumatic supply ducts,” and “the matrix die.”

In claim 16, there is insufficient antecedent basis for the limitations “the two air flows,” “the covering differences,” “the matrix die,” “the plate abutment,” “the angle measure,” “the position measure,” and “the external compensating device.”

In claim 17, there is insufficient antecedent basis for the limitations “the small variations,” “the servo-controlled device,” “the provided angle,” “the pressure difference,” and “the transducer.”

In claim 18, there is insufficient antecedent basis for the limitation “the common compressed air supply.”

In claim 19, there is insufficient antecedent basis for the limitation “the pairs of orifices.”

In claim 20, there is insufficient antecedent basis for the limitations “the pair of orifices” and “the punch.”

In claim 21, there is insufficient antecedent basis for the limitations “the matrix die face,” “the plate sheet,” “the vertical axis of the matrix die groove apex,” “the mean of measures of plate bearing angle,” “the matrix die,” and “the matrix die slot.”

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-14 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Heingartner et al. (US Patent 6,553,803). Heingartner et al. discloses a device and method for detecting the bending angle of a plate sheet comprising a punch (2) and a compressed air/pressure measuring system/ servo-controlled device (8, 14, 15, 15a, and 16); two pairs of orifices (9-12) arranged on the matrix die face that get in contact with the plate sheet in symmetrical positions with respect to the vertical axis of the matrix die groove apex, each one of the orifices being supplied by a respective flow of compressed air, characterized in that the mean of measures of plate bearing angles onto the matrix die (3) is performed by mutually

pneumatically connecting the two orifices (9 and 11) which are external to the matrix die slot and the two orifices (10 and 12) which are internal to the slot itself. Heingartner et al. also disclose generating at least two flows of compressed air in two matrix die points that are totally or partially covered by the plate sheet during its bending step (Figure 1); measuring the pressure variation between flows of compressed air during the bending step; and processing the measured pressure values and comparing them with predetermined sample values through calibration (Column 3, lines 52+). A first flow (9 or 11) of compressed air that is directed perpendicular to the plate sheet before its bending and is placed on the matrix die (3) next to the plane sheet-bearing surface next to the matrix die groove; a second flow (10 or 12) directed perpendicular to the slot surface. Heingartner et al. is capable of measuring the pressure of a pair of compressed air flows on both slot faces.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heingartner et al. in view of Sartorio et al. (US Patent 5,148,693). Heingartner et al. discloses the invention substantially as claimed except for the differential pressure transducer/system pressure reducer, external covering device/shutter, and solenoid valves. Sartorio et al. discloses a method and device for detecting folding angles of a sheet having differential pressure transducer/system

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pressure reducer (differential manometers 69), external covering device/shutter (nozzles 68 and Column 6, lines 64+ - Column 7, lines 1-14)), and solenoid valves (pneumatic gauges 50-53).

The Examiner takes the broadest reasonable interpretation of the external covering device/shutter and therefore the nozzles 68 meet the limitation as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Heingartner et al. with the claimed measuring and regulation instrumentation in order to apply a known technique to a known device ready for improvement to yield predictable results.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa M. Bonk whose telephone number is (571)272-1901. The examiner can normally be reached on M-F 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Teresa M. Bonk
Examiner
Art Unit 3725

/Derris H Banks/
Supervisory Patent Examiner, Art Unit 3725